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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/783,311 | 02/19/2004 | Andrew Nixon | 10280-059001 | 7833 |
| 26161 | 7590 | 12/15/2005 | EXAMINER | |
| FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | SZPERKA, MICHAEL EDWARD | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1644 | |

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,311

Applicant(s)

NIXON ET AL.

Examiner

Michael Szperka

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's preliminary amendment received July 27, 2004 is acknowledged.
Claim 29 has been amended.
Claims 1-37 are pending in the instant application.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 1. Claims 1-13, drawn to the antibody disclosed as a01, classified in class 424, subclass 139.1.
 2. Claims 1-13, drawn to the antibody disclosed as a02, classified in class 424, subclass 139.1.
 3. Claims 1-13, drawn to the antibody disclosed as a03, classified in class 424, subclass 139.1.
 4. Claims 1-13, drawn to the antibody disclosed as a04, classified in class 424, subclass 139.1.
 5. Claims 1-13, drawn to the antibody disclosed as a05, classified in class 424, subclass 139.1.
 6. Claims 1-13, drawn to the antibody disclosed as a06, classified in class 424, subclass 139.1.
 7. Claims 1-13, drawn to the antibody disclosed as b01, classified in class 424, subclass 139.1.

8. Claims 1-13, drawn to the antibody disclosed as b03, classified in class 424, subclass 139.1.
9. Claims 1-13, drawn to the antibody disclosed as b04, classified in class 424, subclass 139.1.
10. Claims 1-13, drawn to the antibody disclosed as b05, classified in class 424, subclass 139.1.
11. Claims 1-13, drawn to the antibody disclosed as c01, classified in class 424, subclass 139.1.
12. Claims 1-13, drawn to the antibody disclosed as c02, classified in class 424, subclass 139.1.
13. Claims 1-13, drawn to the antibody disclosed as c04, classified in class 424, subclass 139.1.
14. Claims 1-13, drawn to the antibody disclosed as c05, classified in class 424, subclass 139.1.
15. Claims 1-13, drawn to the antibody disclosed as c06, classified in class 424, subclass 139.1.
16. Claims 1-13, drawn to the antibody disclosed as d02, classified in class 424, subclass 139.1.
17. Claims 1-13, drawn to the antibody disclosed as d03, classified in class 424, subclass 139.1.
18. Claims 1-13, drawn to the antibody disclosed as d04, classified in class 424, subclass 139.1.

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19. Claims 1-13, drawn to the antibody disclosed as d05, classified in class 424, subclass 139.1.
20. Claims 1-13, drawn to the antibody disclosed as d06, classified in class 424, subclass 139.1.
21. Claims 1-13, drawn to the antibody disclosed as e01, classified in class 424, subclass 139.1.
22. Claims 1-13, drawn to the antibody disclosed as e02, classified in class 424, subclass 139.1.
23. Claims 1-13, drawn to the antibody disclosed as e03, classified in class 424, subclass 139.1.
24. Claims 1-13, drawn to the antibody disclosed as f01, classified in class 424, subclass 139.1.
25. Claims 1-13, drawn to the antibody disclosed as f03, classified in class 424, subclass 139.1.
26. Claims 1-13, drawn to the antibody disclosed as f05, classified in class 424, subclass 139.1.
27. Claims 1-13, drawn to the antibody disclosed as f06, classified in class 424, subclass 139.1.
28. Claims 1-13, drawn to the antibody disclosed as g01, classified in class 424, subclass 139.1.
29. Claims 1-13, drawn to the antibody disclosed as g02, classified in class 424, subclass 139.1.

30. Claims 1-13, drawn to the antibody disclosed as g03, classified in class 424, subclass 139.1.
31. Claims 1-13, drawn to the antibody disclosed as g04, classified in class 424, subclass 139.1.
32. Claims 1-13, drawn to the antibody disclosed as g05, classified in class 424, subclass 139.1.
33. Claims 1-13 and 30, drawn to the antibody disclosed as B12, classified in class 424, subclass 139.1.
34. Claims 1-13, drawn to the antibody disclosed as E06, classified in class 424, subclass 139.1.
35. Claims 1-13 and 31, drawn to the antibody disclosed as F05, classified in class 424, subclass 139.1.
36. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a01, classified in class 424, subclass 133.1.
37. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a02, classified in class 424, subclass 133.1.
38. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a03, classified in class 424, subclass 133.1.
39. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a04, classified in class 424, subclass 133.1.
40. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a05, classified in class 424, subclass 133.1.

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41. Claims 14-15, drawn to methods of detecting PAPP-A using antibody a06, classified in class 424, subclass 133.1.
42. Claims 14-15, drawn to methods of detecting PAPP-A using antibody b01, classified in class 424, subclass 133.1.
43. Claims 14-15, drawn to methods of detecting PAPP-A using antibody b03, classified in class 424, subclass 133.1.
44. Claims 14-15, drawn to methods of detecting PAPP-A using antibody b04, classified in class 424, subclass 133.1.
45. Claims 14-15, drawn to methods of detecting PAPP-A using antibody b05, classified in class 424, subclass 133.1.
46. Claims 14-15, drawn to methods of detecting PAPP-A using antibody c01, classified in class 424, subclass 133.1.
47. Claims 14-15, drawn to methods of detecting PAPP-A using antibody c02, classified in class 424, subclass 133.1.
48. Claims 14-15, drawn to methods of detecting PAPP-A using antibody c04, classified in class 424, subclass 133.1.
49. Claims 14-15, drawn to methods of detecting PAPP-A using antibody c05, classified in class 424, subclass 133.1.
50. Claims 14-15, drawn to methods of detecting PAPP-A using antibody c06, classified in class 424, subclass 133.1.
51. Claims 14-15, drawn to methods of detecting PAPP-A using antibody d02, classified in class 424, subclass 133.1.

52. Claims 14-15, drawn to methods of detecting PAPP-A using antibody d03, classified in class 424, subclass 133.1.
53. Claims 14-15, drawn to methods of detecting PAPP-A using antibody d04, classified in class 424, subclass 133.1.
54. Claims 14-15, drawn to methods of detecting PAPP-A using antibody d05, classified in class 424, subclass 133.1.
55. Claims 14-15, drawn to methods of detecting PAPP-A using antibody d06, classified in class 424, subclass 133.1.
56. Claims 14-15, drawn to methods of detecting PAPP-A using antibody e01, classified in class 424, subclass 133.1.
57. Claims 14-15, drawn to methods of detecting PAPP-A using antibody e02, classified in class 424, subclass 133.1.
58. Claims 14-15, drawn to methods of detecting PAPP-A using antibody e03, classified in class 424, subclass 133.1.
59. Claims 14-15, drawn to methods of detecting PAPP-A using antibody f01, classified in class 424, subclass 133.1.
60. Claims 14-15, drawn to methods of detecting PAPP-A using antibody f03, classified in class 424, subclass 133.1.
61. Claims 14-15, drawn to methods of detecting PAPP-A using antibody f05, classified in class 424, subclass 133.1.
62. Claims 14-15, drawn to methods of detecting PAPP-A using antibody f06, classified in class 424, subclass 133.1.

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63. Claims 14-15, drawn to methods of detecting PAPP-A using antibody g01, classified in class 424, subclass 133.1.
64. Claims 14-15, drawn to methods of detecting PAPP-A using antibody g02, classified in class 424, subclass 133.1.
65. Claims 14-15, drawn to methods of detecting PAPP-A using antibody g03, classified in class 424, subclass 133.1.
66. Claims 14-15, drawn to methods of detecting PAPP-A using antibody g04, classified in class 424, subclass 133.1.
67. Claims 14-15, drawn to methods of detecting PAPP-A using antibody g05, classified in class 424, subclass 133.1.
68. Claims 14-15, drawn to methods of detecting PAPP-A using antibody B12, classified in class 424, subclass 133.1.
68. Claims 14-15, drawn to methods of detecting PAPP-A using antibody E06, classified in class 424, subclass 133.1.
70. Claims 14-15, drawn to methods of detecting PAPP-A using antibody F05, classified in class 424, subclass 133.1.
71. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a01, classified in class 424, subclass 143.1.
72. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a02, classified in class 424, subclass 143.1.
73. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a03, classified in class 424, subclass 143.1.

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74. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a04, classified in class 424, subclass 143.1.
75. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a05, classified in class 424, subclass 143.1.
76. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody a06, classified in class 424, subclass 143.1.
77. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody b01, classified in class 424, subclass 143.1.
78. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody b03, classified in class 424, subclass 143.1.
79. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody b04, classified in class 424, subclass 143.1.
80. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody b05, classified in class 424, subclass 143.1.
81. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody c01, classified in class 424, subclass 143.1.
82. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody c02, classified in class 424, subclass 143.1.
83. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody c04, classified in class 424, subclass 143.1.
84. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody c05, classified in class 424, subclass 143.1.

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85. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody c06, classified in class 424, subclass 143.1.
86. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody d02, classified in class 424, subclass 143.1.
87. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody d03, classified in class 424, subclass 143.1.
88. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody d04, classified in class 424, subclass 143.1.
89. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody d05, classified in class 424, subclass 143.1.
90. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody d06, classified in class 424, subclass 143.1.
91. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody e01, classified in class 424, subclass 143.1.
92. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody e02, classified in class 424, subclass 143.1.
93. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody e03, classified in class 424, subclass 143.1.
94. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody f01, classified in class 424, subclass 143.1.
95. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody f03, classified in class 424, subclass 143.1.

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96. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody f05, classified in class 424, subclass 143.1.
97. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody f06, classified in class 424, subclass 143.1.
98. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody g01, classified in class 424, subclass 143.1.
99. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody g02, classified in class 424, subclass 143.1.
100. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody g03, classified in class 424, subclass 143.1.
101. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody g04, classified in class 424, subclass 143.1.
102. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody g05, classified in class 424, subclass 143.1.
103. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody B12, classified in class 424, subclass 143.1.
104. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody E06, classified in class 424, subclass 143.1.
105. Claims 16-25 and 27, drawn to methods of disease treatment by administering antibody F05, classified in class 424, subclass 143.1.
106. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a01, classified in class 424, subclass 139.1.

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107. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a02, classified in class 424, subclass 141.1.
108. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a03, classified in class 424, subclass 141.1.
109. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a04, classified in class 424, subclass 141.1.
110. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a05, classified in class 424, subclass 141.1.
111. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody a06, classified in class 424, subclass 141.1.
112. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody b01, classified in class 424, subclass 141.1.
113. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody b03, classified in class 424, subclass 141.1.
114. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody b04, classified in class 424, subclass 141.1.
115. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody b05, classified in class 424, subclass 141.1.
116. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody c01, classified in class 424, subclass 141.1.
117. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody c02, classified in class 424, subclass 141.1.

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118. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody c04, classified in class 424, subclass 141.1.
119. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody c05, classified in class 424, subclass 141.1.
120. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody c06, classified in class 424, subclass 141.1.
121. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody d02, classified in class 424, subclass 141.1.
122. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody d03, classified in class 424, subclass 141.1.
123. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody d04, classified in class 424, subclass 141.1.
124. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody d05, classified in class 424, subclass 141.1.
125. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody d06, classified in class 424, subclass 141.1.
126. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody e01, classified in class 424, subclass 141.1.
127. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody e02, classified in class 424, subclass 139.1.
128. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody e03, classified in class 424, subclass 141.1.

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129. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody f01, classified in class 424, subclass 141.1.
130. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody f03, classified in class 424, subclass 141.1.
131. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody f05, classified in class 424, subclass 141.1.
132. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody f06, classified in class 424, subclass 141.1.
133. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody g01, classified in class 424, subclass 141.1.
134. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody g02, classified in class 424, subclass 141.1.
135. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody g03, classified in class 424, subclass 141.1.
136. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody g04, classified in class 424, subclass 141.1.
137. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody g05, classified in class 424, subclass 141.1.
138. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody B12, classified in class 424, subclass 141.1.
139. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody E06, classified in class 424, subclass 141.1.

140. Claims 26 and 28, drawn to methods of modulating IGF activity using antibody F05, classified in class 424, subclass 141.1.
141. Claim 29, drawn to an isolated protein that binds PAPP-A, classified in class 530, subclass 388.1.
142. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a01, classified in class 536, subclass 23.53, and class 435, subclass 325.
143. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a02, classified in class 536, subclass 23.53, and class 435, subclass 325.
144. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a03, classified in class 536, subclass 23.53, and class 435, subclass 325.
145. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a04, classified in class 536, subclass 23.53, and class 435, subclass 325.
146. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a05, classified in class 536, subclass 23.53, and class 435, subclass 325.
147. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody a06, classified in class 536, subclass 23.53, and class 435, subclass 325.
148. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody b01, classified in class 536, subclass 23.53, and class 435, subclass 325.
149. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody b03, classified in class 536, subclass 23.53, and class 435, subclass 325.
150. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody b04, classified in class 536, subclass 23.53, and class 435, subclass 325.

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151. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody b05, classified in class 536, subclass 23.53, and class 435, subclass 325.
152. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody c01, classified in class 536, subclass 23.53, and class 435, subclass 325.
153. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody c02, classified in class 536, subclass 23.53, and class 435, subclass 325.
154. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody c04, classified in class 536, subclass 23.53, and class 435, subclass 325.
155. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody c05, classified in class 536, subclass 23.53, and class 435, subclass 325.
156. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody c06, classified in class 536, subclass 23.53, and class 435, subclass 325.
157. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody d02, classified in class 536, subclass 23.53, and class 435, subclass 325.
158. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody d03, classified in class 536, subclass 23.53, and class 435, subclass 325.
159. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody d04, classified in class 536, subclass 23.53, and class 435, subclass 325.
160. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody d05, classified in class 536, subclass 23.53, and class 435, subclass 325.
161. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody d06, classified in class 536, subclass 23.53, and class 435, subclass 325.

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162. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody e01, classified in class 536, subclass 23.53, and class 435, subclass 325.
163. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody e02, classified in class 536, subclass 23.53, and class 435, subclass 325.
164. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody e03, classified in class 536, subclass 23.53, and class 435, subclass 325.
165. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody f01, classified in class 536, subclass 23.53, and class 435, subclass 325.
166. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody f03, classified in class 536, subclass 23.53, and class 435, subclass 325.
167. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody f05, classified in class 536, subclass 23.53, and class 435, subclass 325.
168. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody f06, classified in class 536, subclass 23.53, and class 435, subclass 325.
169. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody g01, classified in class 536, subclass 23.53, and class 435, subclass 325.
170. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody g02, classified in class 536, subclass 23.53, and class 435, subclass 325.
171. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody g03, classified in class 536, subclass 23.53, and class 435, subclass 325.
172. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody g04, classified in class 536, subclass 23.53, and class 435, subclass 325.

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173. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody g05, classified in class 536, subclass 23.53, and class 435, subclass 325.
174. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody B12, classified in class 536, subclass 23.53, and class 435, subclass 325.
175. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody E06, classified in class 536, subclass 23.53, and class 435, subclass 325.
176. Claims 32-37, drawn to DNA, vectors and host cells that encode antibody F05, classified in class 536, subclass 23.53, and class 435, subclass 325.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions (1-35 and 141) and (36-140) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case antibodies of the invention can be used in different methods, such as for purification of PAPP-A or in diagnostic assays.

4. Inventions 1-35, 141, and 142-176 are different products. Polypeptides and nucleic acids differ in their physical structure, these differences giving rise to unique functional properties that make them differentially suitable for use in various methods.

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For instance, the nucleic acid sequences can be used in gene therapy methods, while antibodies to PAPP-A can be used to purify the PAPP-A antigen itself. The amino acid sequence of the variable region of an antibody determines its antigen binding specificity, and all of the claimed antibodies appear to differ in the sequence of their variable regions. Art that anticipates or renders obvious any one of the antibody variable domains would not necessarily anticipate or render obvious any other antibody sequence. It is possible that art that reads on one particular sequence may anticipate or render obvious other recited antibodies. If this is true, then applicant is requested to clearly state in the reply to this restriction requirement which of the claimed antibodies should be properly grouped together since art on one antibody necessarily either anticipates or renders obvious the other antibodies indicated by applicant.

5. Inventions 36-140 are different methods. As such they recite different process steps such as administering, identifying, and modulating, require unique ingredients such as antibodies, proteins, and pharmaceutical compositions, and achieve divergent goals such as detection of disease, therapeutic treatment of a disease, and altering IGF activity in a patient. Art that anticipates or renders obvious one group would not necessarily anticipate nor render obvious the invention of the other group. Therefore they are patentably distinct.

6. Inventions 142-176 and 36-140 are not related as product and process of use. The nucleic acid products of Groups 142-176 are not recited as being useful in

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performing the indicated methods since all of the recited methods require the use of proteins and not nucleic acid molecules. As such they are patentably distinct.

7. Because these inventions are distinct for the reasons given above, because the literature searches required for Groups 1-176 are not coextensive in that art that anticipates or renders obvious the invention of any one group would not necessarily anticipate or render obvious the inventions of the other groups, and because Groups 1-176 have acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

8. This application contains claims directed to the following patentably distinct species of the claimed invention of Group 141. The different species are the identity of the sequences that make up the CDR sequences of the claimed antibody. Since the CDR sequences contribute most to antigen binding, antibodies comprising different CDR sequences can bind to different antigenic epitopes in a patentably distinct manner, thus giving the antibody unique functional properties such as agonist or antagonist activity, differing strength of interaction, and interaction with different epitopes of the PAPP-A antigen. As such, applicant is required in response to this office action to minimally select one CDR sequence from all of those listed in claim 29, and will preferably elect six CDR sequences, one for each of the six CDR regions found in a functional antibody that comprises heavy and light chain polypeptide sequences.

Failure to elect at least one sequence for any CDR sequence will be considered to be a non-responsive election if applicant elects the invention of Group 141.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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9. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Szperka whose telephone number is 571-272-2934. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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November 28, 2005


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12/7/05